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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,143	02/27/2004	Jeffrey A. Tilton	25363A	9278

22889 7590 05/23/2006

OWENS CORNING
2790 COLUMBUS ROAD
GRANVILLE, OH 43023

EXAMINER

PIZIALI, ANDREW T

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 05/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/789,143

Applicant(s)

TILTON ET AL.

Examiner

Andrew T. Piziali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/3/2006 has been entered.

Response to Amendment

2. The amendment filed on 4/3/2006 has been entered. Applicant's amendment necessitated the new grounds of rejection presented in this Office action.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 9-15 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,616,408 to Oleszczuk et al. (hereinafter referred to as Oleszczuk), or USPN 5,804,512 to Lickfield et al. (hereinafter referred to as Lickfield), in view of USPN 6,022,818 to Welch et al. (hereinafter referred to as Welch).

Regarding claims 1-5, 9-15 and 19-22, Oleszczuk and Lickfield each disclose an article comprising a first supporting layer of wet processed mat (14), and a second supporting layer of wet processed mat (16), wherein said first and/or second layer comprises thermoplastic polymer staple fibers and thermoplastic bicomponent fibers (see entire documents including the paragraph bridging columns 11 and 12 of Oleszczuk and column 9, lines 12-20 of Lickfield). Oleszczuk and Lickfield each disclose that the layers of the article may be directly thermally bonded (see column 8, lines 55-63 of Oleszczuk and column 4, lines 59-67 of Lickfield).

Oleszczuk and Lickfield each disclose that additional (wet processed spunbonded mat) supporting layers may be added to the article (see column 8, lines 64-67 and the paragraph bridging columns 12 and 13 of Oleszczuk and column 5, lines 1-4 and column 10, lines 10-23 of Lickfield), but the references do not appear to specifically mention at least one adjacent additional layer of different fiber formulation. Welchel discloses that it is known in the nonwoven laminate art to use an additional nonwoven layer with a different fiber formulation from the adjacent nonwoven layer, so that the surface is more aesthetically pleasing to the touch and more comfortable to the user (see entire document including column 5, lines 61-65). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make at least one additional adjacent supporting layer with a different fiber formulation, as taught by Welchel, because the layer could be designed to be more aesthetically pleasing to the touch and more comfortable to the user.

Regarding claims 3 and 15, Oleszczuk and Lickfield each disclose that the fibers may be polyester, polyethylene, and/or PET (see column 8, lines 22-54 and column 12, lines 43-56 of Oleszczuk and column 3, lines 55-67 and column 10, lines 1-9 of Lickfield).

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Regarding claims 4, 5 and 13, Oleszczuk and Lickfield each disclose that the layers may be thermally bonded (see column 8, lines 55-63 of Oleszczuk and column 4, lines 59-67 of Lickfield).

Regarding claims 9 and 19, Oleszczuk and Lickfield each disclose that the first or second layer may be hydrophilic (see column 12, lines 31-43 of Oleszczuk and column 4, lines 1-17 of Lickfield).

Regarding claims 10 and 20, Oleszczuk and Lickfield each disclose that the first or second layer may be flame retardant (heat resistant) (see column 12, lines 31-43 of Oleszczuk and column 9, lines 52-63 of Lickfield).

Regarding claims 11 and 21, Oleszczuk and Lickfield each disclose that fibers of the first or second layer may be polyethylene (column 8, lines 22-54 of Oleszczuk and column 3, line 55 through column 4, line 17 of Lickfield), which is inherently hydrophobic.

Regarding claims 12 and 22, Oleszczuk and Lickfield each disclose that the fibers may include natural fibers such as cotton or wool (see column 8, lines 37-54 of Oleszczuk and column 4, lines 1-17 of Lickfield), which are inherently sound absorbent.

5. Claims 6-8 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,616,408 to Oleszczuk, or USPN 5,804,512 to Lickfield, in view of USPN 6,022,818 to Welch as applied to claims 1-5, 9-15 and 19-22 above, and further in view of USPN 4,813,948 to Insley.

Oleszczuk and Lickfield are each silent with regards to specific layer thicknesses, therefore, it would have been necessary and thus obvious to look to the prior art for conventional thicknesses. Insley provides this conventional teaching showing that it is known in the

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nonwoven barrier fabric art to use layer thicknesses ranging from 0.02 to 4 cm (see entire document including column 3, lines 43-62 and column 11, lines 39-51). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the layers with a thickness ranging from 0.02 to 4 cm, motivated by the expectation of successfully practicing the invention of Oleszczuk and/or Lickfield.

6. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,616,408 to Oleszczuk, or USPN 5,804,512 to Lickfield, in view of USPN 6,022,818 to Welch as applied to claims 1-5, 9-15 and 19-22 above, and further in view of any one of USPN 6,548,431 to Bansal et al. (hereinafter referred to as Bansal) or USPN 4,508,113 to Malaney.

Oleszczuk and Lickfield each disclose that the fibers may be bicomponent fibers comprising a polyethylene sheath (see column 12, lines 44-56 of Oleszczuk and column 10, lines 1-9 of Lickfield), but Oleszczuk and Lickfield are each silent with regards to a specific bonding temperature. Therefore, it would have been necessary and thus obvious to look to the prior art for conventional bonding temperatures. Bansal and Malaney each provide this conventional teaching showing that it is known in the art to use a bonding temperature within a range of about 100 to about 150C (about 200 to 300F) when bonding polyethylene (see entire documents including column 8, lines 22-38 of Malaney and column 14, lines 37-52 of Bansal). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply heat at a temperature range of 200 to 300F, motivated by the expectation of successfully practicing the invention of Oleszczuk and/or Lickfield.

Response to Arguments

7. Applicant's arguments have been considered but are mostly moot in view of the new grounds of rejection.

Regarding claims 6-8 and 16-18, the applicant asserts that the motivation to combine references is inadequate. The applicant asserts that the stated reason for the combination fails to supply the requisite substantial evidence of motivation. The examiner respectfully disagrees. Oleszczuk and Lickfield are each silent with regards to specific layer thicknesses, therefore, it would have been necessary and thus obvious to look to the prior art for conventional thicknesses. Insley provides this conventional teaching showing that it is known in the nonwoven barrier fabric art to use layer thicknesses ranging from 0.02 to 4 cm (see entire document including column 3, lines 43-62 and column 11, lines 39-51). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the layers with a thickness ranging from 0.02 to 4 cm, motivated by the expectation of successfully practicing the invention of Oleszczuk and/or Lickfield. It is noted that the applicant fails to show, or attempt to show, why one skilled in the art would not be motivated to successfully practice the invention of Oleszczuk and/or Lickfield.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gpd 4/14/06

atp

ANDREW T. PIZIALI
PATENT EXAMINER